

From: [Sheldrake, Sean](#)
To: [Chu Rebecca](#); [Gustavson, Karl](#)
Cc: [Lance Peterson \(PetersonLE@cdmsmith.com\)](#)
Subject: RE: Heads up on the Gasco Conversation Re: sampling leave layer before placing backfill when dredging sf deliberative
Date: Tuesday, November 14, 2017 11:47:00 AM
Attachments: [image002.gif](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

This is good stuff Becky—I think we should definitely consider this in whatever approach we embrace at PH! CC'ing CDM so that we can consider this Duwamish specific detail in framing future comments.

S

Sean Sheldrake, Unit Diving Officer, RPM
EPA Region 10, 1200 Sixth Ave., Suite 900; Mailstop DOC-01
Seattle, WA 98101
206.553.1220 desk
206.225.6528 cell
<http://yosemite.epa.gov/r10/cleanup.nsf/sites/ptldharbor>



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From: Chu Rebecca
Sent: Tuesday, November 14, 2017 11:06 AM
To: Gustavson, Karl <Gustavson.Karl@epa.gov>; Sheldrake, Sean <sheldrake.sean@epa.gov>
Subject: Heads up on the Gasco Conversation Re: sampling leave layer before placing backfill when dredging

Karl and Sean

I am coming in with little background on the Gasco, but as a heads up: I had very similar conversations with Anchor on these same issues at the Duwamish about managing residuals and determining compliance with sediment cleanup where the requirement was to remove all the material above the RvAL and replace the material to grade with clean backfill. In that instance, Anchor's language in the CQAP did not align with the AM—the CQAP language provided that they would leave material in place 20x above the RvAL (RvAL was 12 ppm PCBs, consistent with state's SMS no, so leaving material in place up to 240 ppm). Anchor did not analyze the samples before placing backfill material (similar logic as described today—concerns about resuspension, fluff, "inventory" versus "residual"), leaving material in place well in exceedance of the RvAL.

This resulted in EPA performing an assessment of the material left in place

below the backfill using the Corps breakthrough model, and determining that over a 50 & 100 year timeframe, there was a risk of the PCB contaminants migrating into the biologically active zone in concentrations above the RvAL. We just (July?) renegotiated an amendment of the AOC at that site to have the PRP perform an EE/CA Addendum to identify mechanisms to address those areas where breakthrough was likely to occur. It will likely require the PRPs perform additional work at the site because the current circumstances will not provide meeting the removal action goals.

A reason this played out this way is because adjacent sites, like Boeing Plant 2 and T-117, had dredged, sampled at the bottom of the dredge prism, analyzed the samples, and either dredged another foot (I think it was a foot or 2 feet), resampled, analyzed, and I think took 2 passes at most and then placed fill. And so this resulted in meeting the RvALs almost across the entire site versus what happened at my site. And these other sites had the exact same challenges (background sediment contamination, other in-water work, resuspension of contaminated sediment, sequencing of work amongst all of these sites, etc) that Anchor mentioned today on the phone. So this work really stood out as an anomaly of the other LDW Early Action sites.

Just as an FYI. As I told Sean- this site was particularly challenging- the contractors performing the work didn't follow the RAWP which resulted in a very large stipulated penalty amount- we had multiple outstanding formal disputes, etc. So hopefully that was a one-off.

Becky

Rebecca Chu | Remedial Project Manager
United States Environmental Protection Agency
Region 10
1200 Sixth Ave Suite 900
ECL-122
Seattle, WA 98101
(206) 553-1774
Chu.Rebecca@epa.gov